

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).
2. (currently amended): A method of forming a metal oxide film according to ~~claim 1~~ claim 27, wherein said glow discharge is carried out in a microwave electric field.
3. (currently amended): A method of forming a metal oxide film according to claim 2, wherein said low power~~low-output region~~ is in a range of 20 to 90 watts, and said high power~~high-output region~~ is in a range of not lower than 100 watts.
4. (currently amended): A method of forming a metal oxide film according to claim 3, wherein an~~the~~ output power of said microwave electric field is continuously changed from said low power~~low-output region~~ up to said high power~~high-output region~~.
5. (currently amended): A method of forming a metal oxide film according to claim 3, wherein an~~the~~ output power of said microwave field is changed stepwise from said low power~~low-output region~~ up to said high power~~high-output region~~.
6. (currently amended): A method of forming a metal oxide film according to claim 2, wherein an~~the~~ output of said microwave electric field is changed from said low power~~low-output region~~ to said high power~~high-output region~~, which is, then, followed by the repetition of a change of output from high power~~the high-output region~~ to low power~~the low-output region~~ and a change of output from low power to high power~~the low-output region to the high-output region~~.

7. (currently amended): A method of forming a metal oxide film according to ~~claim 1~~
claim 27, wherein ~~an organosilicon compound is used as~~ said organometal comprises an
organosilicon compound.
8. (currently amended): A method of forming a metal oxide film according to ~~claim 1~~
claim 27, wherein ~~a plastic material is used as~~ said substrate comprises a plastic material.
9. (currently amended): A method of forming a metal oxide film according to claim 7,
wherein said first CVD film comprises an organic layer ~~is formed maintaining~~ having a thickness
of not larger than 10 nm formed on the surface of the substrate by a low power ~~the~~ microwave
glow discharge ~~in the low-output region~~, said organic layer being rich in carbon and having a
carbon concentration of not smaller than 15% on the basis of three elements of O, C and Si.
10. (currently amended): A method of forming a metal oxide film according to claim 9,
wherein ~~said a~~ metal oxide film ~~is formed having~~ has a total thickness of not larger than 100 nm.
11. (currently amended): A method of forming a metal oxide film according to claim 2,
wherein ~~said~~ microwaves in said microwave electric field are intermittently oscillated.
12. (currently amended): A method of forming a metal oxide film according to claim 11,
wherein ~~an~~ the output waveform of said microwaves is changed by changing a maximum output
and an oscillation time.
13. (currently amended): A method of forming a metal oxide film according to claim 11,
wherein ~~an~~ the output waveform of the microwaves in the ~~low-output region~~ low power glow
discharge is different from ~~an~~ the output waveform of the microwaves in the high power glow
discharge ~~high-output region~~.
14. (currently amended): A method of forming a metal oxide film according to claim 13,
wherein ~~an~~ the output waveform of the microwaves in the low power glow discharge ~~low-output~~

~~region~~ is such that ~~an~~the oscillation time of microwaves in one period is not longer than 1.5 milliseconds.

15. (currently amended): A method of forming a metal oxide film according to claim 13, wherein ~~an~~the output waveform of the microwaves in the high power glow discharge~~high-output~~ ~~region~~ is such that ~~an~~the oscillation time of microwaves in one period is not shorter than 2 milliseconds.

16. (currently amended): A method of forming a metal oxide film according to claim 11, wherein ~~a~~the stop time of the microwaves in one period is 2 milliseconds to 30 milliseconds.

17. (canceled).

18. (canceled).

19. (canceled).

20. (canceled).

21. (canceled).

22. (canceled).

23. (canceled).

24. (canceled).

25. (canceled).

26. (canceled).

27. (new): A method of forming a metal oxide film having a gas-barrier property on a surface of a predetermined substrate by plasma CVD using a treatment gas which contains a gas of an organometal and an oxidizing gas, said method comprising:

executing a low power glow discharge so as to carry out a reaction chiefly between organometals contained in the treatment gas and thereby form a first CVD film on the surface of the substrate, and

executing a high power glow discharge so as to react the organometal with the oxidizing gas and thereby form a second CVD film on the first CVD film.